

WATER RESOURCES



FIELD



EXPERIENCES

COMPILED:- D.B. POPE

1982

GB
658.4
W27

FOREWORD

This is a collection of true personal experiences of field engineers and technicians of the Water Survey of Canada as reported by personnel from the several Regional offices across Canada.

Some of these experiences which appear comical now, were not so funny when the event actually occurred in the field.

An expression of thanks is hereby extended to all who helped make this publication possible.

GUMBO

by P.I. Campbell

Spring in Southern Saskatchewan usually brings such incongruous mixtures of weather as dust and mud, warm sunshine and snow only hours or a few miles apart.

This anecdote resulted from just such an incongruity, an unexpected wind storm churning up light, fresh snow on the beautiful Cypress Hills south of Maple Creek, Saskatchewan into what is known as a ground blizzard. Only the hills had an appreciable snow cover remaining after it had already practically all disappeared from the surrounding prairie hay fields. The snow-covered road through the hills gave way to typical "gumbo" on the lower slopes and the flats.

This was my first trip into the hills. I was driving a vehicle which also was almost unfamiliar to me, a large Mercedes-Benz jeep called a Unimog. The experienced hydrographer, John Fowler, who lived in the area explained that he would go ahead in his car, service a gauge on the way and proceed to the town of Consul on the far side of the Hills. I was to follow in the much slower Unimog and meet him in Consul.

We left Maple Creek in brilliant sunshine with no clouds to be seen. Soon after gaining the higher ground, I noticed the wind causing considerable drifting along the road, which tended to partially obscure the tracks left by other vehicles. It was easy to see the edges of the built-up road, however, and not at all necessary to reduce my exhilarating speed of 15 to 20 mph. The sun continued to shine and the wind continued to increase until soon I could see nothing but the occasional fence post to right or left and the clear sky straight above. The churning blanket of snow appeared to be only 10 or 15 feet thick. I soon found myself navigating by following the streaks of snow that seemed to follow the road rather than cross it as one would expect. I would occasionally feel one side or the other of the Unimog begin to dip off the edge of the road and with sweaty palms would make a frantic correction to port or starboard. The wind increased so that visibility was hardly beyond the snub nose of the Unimog. What to do? To stop would invite a rear-end collision, it was impossible to tell whether there were any side roads where I could have turned off. There was nothing left to do but continue. Besides, I was doing OK with my blind navigation.

I was just wondering how long it might be before the wind subsided or the road began descending the other side of the hills when a fourth alternative presented itself with disconcerting suddenness. Why not miss a turn in the road, stand the Unimog on its nose in a deep, snow-filled ditch and stop so abruptly that all the equipment would come flying to the front, including the driver? I had not realized that I was inclined to such impetuous decisions to say nothing of the speed with which I accomplished the feat.

Activity in the next few hours seemed compressed in time - shovelling snow, getting assistance from a passing army truck, turning around to return to Maple Creek, all the time becoming more worried because the diesel engine in the Unimog kept getting slower and slower. Unknown to me at the time, a diesel engine has to be kept hot to function properly and it had gotten quite chilly while being stopped in the ditch with the howling wind ventilating the engine compartment.

As I recall, the Unimog has six gears forward and according to the book the lowest gear was the only appropriate one for the maximum speed I could coax out of the engine. I began to calculate how long it would take me to return to Maple Creek. At that speed it would be very late into the night so I threw caution and compassion for the Unimog to the wind and slammed it into 3rd gear. The machine was obviously labouring heavily as it lurched along but now I could get back by sunset, an obvious advantage under the prevailing weather conditions.

A combination of the labouring engine and gradually diminishing wind allowed the engine heat to rise until finally when I started down the face of the hill to Maple Creek, which was clearly visible in the sunshine a few miles away, I had the Unimog in "the big wheel" once again careening down the muddy road well in excess of 30 mph.

A check at the garage revealed no obvious faults with the Unimog. It was like going to the doctor after the pain had disappeared. A check around town revealed no other Water Resources vehicle. Mr. Fowler had either been successful or was still in the Hills, so back I went.

It was hard to believe that the road was the same one I had travelled on only a few hours earlier. No new snow had fallen but the hills were magnificent in their remodelled coat which was sparkling and sublimely innocent. I soon discovered, at least partially, what had happened to Mr. Fowler because his car was solidly entrenched in the ditch only a mile or two further than I had gotten. Assuming he had hitched a ride ahead instead of back, I continued on and soon met a cattle liner which waved me down. Mr. Fowler had run out of gas, gotten a ride ahead but when he could not find me in Consul had to catch a ride back to determine my fate.

The burley Unimog had the car back on the road in no time and I started towing it back to Maple Creek.

This yarn so far has only set the scene. Now I shall come to the point of the incident. Remember that the road through the hills was snow-covered or frozen while the sloped portion and lower flat portion were coated with slippery, glue-like gumbo. As we started out I kept checking behind to see that all was well, which it was. By the time we reached the brink of the hills, I had settled into a routine of an occasional glance into the rear view mirror and was concentrating on getting the Unimog into 6th gear and keeping it on the road.

Unknown to me a frightening drama was unfolding in the car in tow. Picture the large, tractor-like tires of the Unimog flinging mud back on the windshield of the car. It was much too heavy and sticky for the windshield wipers to cope with and quickly reduced forward visibility to zero. Mr. Fowler desperately rolled down the side window intending to stick his head out but thought better of it as he listened to the heavy clods of mud thumping against the windshield. The horn. He leaned on the horn hoping that if I heard it and stopped I would do so very gradually. As far as I was concerned he may as well have whispered. The snarl of the engine and the clatter of equipment in the Unimog rendered me oblivious to all other sounds.

On the outskirts of town we stopped and I dismounted from the cab of the Unimog somewhat elated over having survived the ground blizzard and now successfully towing the car back with a machine I was beginning to know much better. I was puzzled to see the obviously upset driver shakily emerging from the grey bulk behind me. But there was no mistaking the meaning of the short, forceful statement which ensued. A greater insult, however, came that evening when we joined a third Water Resources fieldman who had been working all day in the enjoyable spring weather in the vicinity of Maple Creek. I started to recount the excitement we had had in the hills by saying we encountered a ground blizzard. He merely chuckled, looked into the distance and said something like "a ground blizzard, eh."

He didn't believe me!

MISSING HALF OF A STREAM DURING A DISCHARGE MEASUREMENT

by J.D. McLeod

One hot afternoon late in August 1945, I went to make a discharge measurement of Seton Creek, a tributary of the Fraser River near Lillooet, B.C. The reach of the creek near the outlet of Seton Lake was unsuitable for measurement purposes, so I proceeded some miles downstream, and left the vehicle at a small ranch owned by a Mrs. McGillivray, who was not at home at the time. About a half mile from the ranch house, I found the creek channel well defined, with heavy underbrush on both banks limiting visibility both upstream and downstream. At this gently-curving reach of the stream conditions for measurement were good -- single channel, reasonably uniform cross-section and fast flow (almost too fast for wading). However, I completed a wading measurement and returned to the ranch where I had parked the vehicle. Mrs. McGillivray had returned also, and in speaking to her, I mentioned that the creek seemed fairly high for the time of year. She agreed and said it was equally high behind the island. (Island? -- I hadn't seen any island!) On leaving her, I returned to the creek, waded it again at the measuring section I had used, and continued through the underbrush for some distance when I came to a second channel, almost as large as the one I had seen and measured originally. After measuring the flow in the second channel, it occurred to me that while some of my previous measurements elsewhere may have been inaccurate by some percentage, this was the first and I hope the only time I was nearly out by 50%!

RUM -- THE ESSENTIAL ON SOME FIELD TRIPS

by J.D. McLeod

The treasury won't pay for rum on an expense account, but there are times when it is the key to a successful field trip. One such occasion for me was a trip to Chilliwack Lake, adjacent to the Lower Fraser Valley in British Columbia.

For many years the only access to the gauging station on the Chilliwack River at the outlet of Chilliwack Lake was by vehicle to the Bell farmstead near Sardis, then by horseback for 30-odd miles on a badly overgrown trail with numerous windfalls, and a river crossing wherever one could swim the horses about 20 miles along the way. Winter trips could be miserable, with a poor trail, wet snow and sleet, and the river at high winter stage. The usual packer was Ed. Bell who was well into middle age and as lazy as one could be and still be alive, but who would really work at times to slake his thirst.

On one such winter trip, the weather was at its worst; snow and sleet all the way made very heavy going for the horses, and dusk was approaching when we were still about ten miles from the lake. Ed wanted to camp overnight on the trail, but I wouldn't agree, advising him that the bottle of rum in my saddlebag would be opened when we unpacked at Chilliwack Lake and not before. Our pace improved at once; and in spite of the horses' weariness we made relatively good time for the last ten miles, even though we were carried at least half a mile downstream while swimming the horses across the river in the darkness. After about 13 hours on the way, we finally reached the lake, opened the trapper's cabin we used there, got a fire going and broached the rum bottle. Rum never tasted better; it really should be an issue for such trips.

THE LONG AND THE SHORT OF IT

by R. Brawn

My story begins in August 1949. Doug McLeod, my boss in those days, assigned to me the job of obtaining discharge measurements and levelling gauges at the hydrometric gauging stations along the coast of British Columbia.

I left Vancouver on August 3rd at 2100 hours on the Union Steamship U.S.S. Camoson, which was a combination passenger and freight boat and a charming old tub even then. The fare from Vancouver to Arrandale, a wharf at the mouth of the Nass River 45 miles northeast of Prince Rupert, was \$41.81. This included very good meals and a single berth. We arrived at Arrandale at 0600 hours on August 8th. Although my destination was Aiyansh on the Nass River, it was rather vague how I was going to get there. Rather than by arrangement, it seemed mostly luck that a B.C. Packers trawler met the Union Steamship to transport mail and supplies from Arrandale to Mill Bay across the estuary. Mill Bay was a store and a net loft.

I guess Doug McLeod knew what he was doing when he sent me on this trip because by golly there was a mail boat going to Aiyansh that day. This boat was covered at the bow to provide some shelter and the rest was open. The river boat was operated by Abel Derrick and his partner. The boat had erotic provisions for the 65 mile trip up river - dried fish in the bilge and some tea. We left Mill Bay at 1500 hours on August 8th and arrived at Aiyansh at 1000 hours on the 9th. For those who like to sleep on the ribs of an open boat, the overnight trip on the river would have been enjoyable.

Aiyansh, I was told, translates to "early leaves" or "early spring". It consisted of a modern two-room school building, a couple of rows of Indian houses, all overlooked by the big white house on the hill occupied by Reverend Kinley, the Anglican Minister. It was apparent that the Russians had an early influence in this area because the architecture of some of the roofs of the houses was native to these early traders. The village was quiet except for the dogs because most villagers were away fishing. Flying over the Nass River valley in later years I realized then the beauty and interesting topography of the area with its clear green lakes, broad treed glaciated valleys and mountain slopes accentuated by relatively recent stark volcanic activity.

Finally, I had to go to work. So that day I hired Abel to take me by boat across the river and downstream to Mr. Robertson, the gauge reader, who operated a small trading post and the river ferry crossing. The rickety old cantilever gauge was out a foot or so. Afterwards, Abel and I looked over the metering cableway towers and anchorages. When I told him I was to ride the cable car next day he answered "you dead - you dead". So I looked at the structure again and with more care. True, the bases of the towers were a little rotten but I couldn't believe Abel when he said the deadmen were also rotten. The bit I uncovered seemed sound when I poked it with my knife.

The next day I prepared to make a discharge measurement. Knowing that all Indians who live remote from the white man are trusting, I had visions of the cableway collapsing as Abel said it would. So I hired him and his boat to follow me along my path to doom. I had visions of jumping out of the cablecar just as it hit the water, as I plan to do, similarly, if I'm involved in an impending airplane crash. Shucks, nothing happened, and I made another measurement later which, when the gauge correction was applied, confirmed the stage-discharge curve last confirmed in 1947.

The villagers did not like the cableway. There were suspicions that they wanted to make a boat ferry cable out of it. However, their objections to the location of the cableway were legitimate in that it interfered with air traffic on the river and right bank anchorage was disturbing their ancestors who were buried nearby. Not only did the villagers not like the cableway, they were not too fussy about the white man, particularly government men, and especially fisheries officers. There had recently been some shooting incidents involving these officers who had the audacity to tell the natives when, where and how to fish. Anyway, getting back to the cableway, it was our intention to discontinue the station and give the cable to the Band and this was done. A few years later I heard that the cableway was still standing in its place. I suppose the ancestors were after all not too concerned and made as much effort to use the cable as the living.

All the while I was at Aiyansh I boarded with Reverend Kinley. In retrospect he was an interesting, hospitable and likeable fellow who I remembered was also proud of his canning of meat. Being used to fresh steak back in civilization, I did not think it so hot. In reflection I regret my lack of appreciation of the efforts and accomplishments of this man and men like him who work on the frontiers under trying circumstances. I suppose my attitude was due to lack of awareness of the important things in life which is typical of the youth in those days, now, and forever more.

Sunday was coming up on the 14th and Reverend Kinley showed me the village church where I fiddled on the pump organ. On Sunday morning, both of us walked down to the church and he rang the bell for services. But none of the villages showed up. Somehow I felt responsible because of my intrusion into the village life. Undaunted the Reverend carried out the service and sang the hymns while I valiantly pumped and played the music. It was all strange to me. In my mixed up youth, I felt something in that church but, to this day, I have not sorted it out. I'm sure that I felt respect for the man, a kind of embarrassment, and a wonderment what the villagers were doing while this strange music was rising in the belfry. Reverend Kinley did not say much when we left except to ask why I hadn't joined in the singing. I felt guilty but tried to explain that with all the pumping, fiddling for correct keys, and looking for the next note of the crowded music, my abilities were taxed to the limit and I had no reserve for singing.

I left in the afternoon with Abel by river boat and spent the night at Mill Bay. From there it was by Union Steamship north to Hyder Alaska and then south to Namu which is a fish cannery half way down the coast. The field

trip was continued in a zig-zag course down the coast picking up hydrometric stations along the way. Transport was provided by fish packer, charter boat, water taxi and finally by aircraft to Vancouver from Port Hardy. Whereas it then took an Engineer twenty-two days to complete the circuit and visit seven stations on the coast, it would now take three technicians about six man days to zip through the same amount of work using helicopters and fixed wing aircraft. But I wonder if they enjoy the adventure as much nowadays?

DANGEROUS ICE

by D.B. Pope

The author remembers an experience in 1950 during his second winter with this Branch while being trained by the Assistant District Engineer of the Montreal Office. This story occurred on the Kiamika River, several miles below Mont Laurier, Quebec, during a January thaw. Upon arriving at the regular winter measuring section, it was found that some water was on the ice and being as this was adjacent to an abandoned saw mill, we borrowed some 2" x 8" planks and formed a temporary ice bridge to work from. The work of cutting the holes, through which to work, went fairly well as there was only 4 or 5 inches of ice. I was a little nervous working under these conditions and asked the Engineer if the river at this location was very deep, to which he replied, "Dont worry, it's only 4 or 5 feet deep". This made me feel somewhat better, but after all the holes were finished, one can imagine how I felt when we commenced working and found a depth of over 11 feet in the first section. Then, as a further scare, when the metering was finished, the water came over the ice and boards and a detour of one-half mile upstream was necessary to get back to the opposite side of the river. The final straw to this episode occurred, early next morning when we returned to the location to check the chain gauge. We found that within one or two hours of our metering, the entire ice cover left the river. Probably many field men can remember similar episodes when they first commenced working with this Branch.

SAVED BY GRAVEL

by H. Wedlock

As I drove off the pavement onto a gravelled side road, the car took a sudden slide for the ditch. I managed to make the proper correction and realized I had hit a patch of slick ice. Being an optimist and thinking conditions would improve, I continued on my way to check and meter the next hydrometric station. As I started down a long steep hill, I started to slide, brakes were useless so I decided to ride it out; however, I picked up speed at such a rate that I overtook a large fully loaded gravel truck with two men on top of the load with their hands in the accustomed stop position. I tried intermittent braking with the resulting fish tail action and, blowing my horn, approached the rear of the truck close enough to see the whites of their eyes. The truck driver got the message and started to increase his speed, and the men went into action shovelling off the gravel to give me traction. The first shovelful went on the engine bonnet. I heard the truck driver changing gears and, as I chased him down the hill, he gradually pulled ahead of me, making room for the thrown gravel to hit the road; by the time I reached the foot of the hill, we were safely spaced and proceeded on our way, avoiding the accident form routine.

IN THE FOG

by H. Wedlock

When we took off from Goose Bay the weather was overcast and cool - typical of late June in Labrador. Our destination was a two hour flight by Norseman to Fremont Lake. As we approached the lake we could see ice cakes drifting along the edges and also at one end. The haze indicated a quick stop was all that could be made and, as our pilot Chris cut the power, he mumbled something about crazy government workers and finished it off in his native Polish tongue.

As with most visits to gauges, it took longer than we had expected and by the time we had everything stowed away, fog and drift ice had moved in.

We started cruising around trying to find a clear area for takeoff and, as darkness was fast approaching, Chris made the dramatic statement that it was off now or here for the night.

During our cruising, we all seemed to lose our sense of direction as we couldn't agree as to where a certain island was in the lake. No time for further discussion. We took a mean of three opinions and, with full power, and hopeful that no ice cakes would loom up, we braced ourselves for the worst. We couldn't see a thing and, as we reached 45 MPH, a forest appeared dead ahead - our lost island; Chris yanked the stick back to the pit of his stomach and with inches to spare we were off for Sandgirt. We touched down at 2215 hours only to find the bears had ransacked the camp. I saw Chris dig out a can of peaches the bears had missed and, after mixing it with rolled oats, ate it, gave a couple of grunts of satisfaction and prepared for a well-deserved sleep.

SLIGHTLY DAMP

by H. Wedlock

"I'll tell you a story you may not believe about the boss" Norm said as he puffed slowly on his pipe while driving along a country road; we were making a stadia survey on the Tetagouche River - very sheer banks, vertical drops ranging from 20 to 50 feet. Ken was making his way around an old windfall with the Transit on his shoulder. Suddenly, the ground gave way and down he went - falling in a vertical position - the Transit still resting on his shoulder. At this point in the story Norm hesitated, checked the speedometer to see that he wasn't exceeding his self-imposed 40 MPH speed limit, re-lit his pipe and continued the tale, punctuated with puffs of smoke. When Ken hit the water I thought he was a gonner - about 20 ft. deep and very large boulders along each edge - his small frame must have saved him, the first thing I saw breaking the water was the Transit and then Ken - exactly in the same position as he went in - the transit still on his shoulder. He made for the shore - immediately set up the transit and with a few well chosen words, proceeded to dry off both himself and the transit.

BACK - ACHE

by H. Wedlock

We booked in at the only Inn late Saturday and had the choice of the best room in the house. It was a large room on the first floor, with water pipes running across the ceiling.

Dan swung his suitcase across the bed and at the same instant let out a bellow like a bull moose holding the position of a discus thrower after completion of his throw - you guessed it, he threw his back out.

As he couldn't get comfortable in any position, I decided to hang him to the pipes while I was phoning a doctor. As soon as he took the hanging position he was relieved of the pain and as I hurriedly made an appointment with a chiropractor, Dan was beginning to complain about aching arms and asking to be let down. His 200 lb. frame was not an easy thing to handle but I managed by a fireman hold to get him through the french windows and into the car. The bonecracker got him to the slightly mobile state and with great care we continued to make our way back to headquarters.

NOTES FROM A FIELDMAN'S DIARY (BRITISH COLUMBIA)

January 16, 1968, spent all day in Ketchikan waiting for snow storm to subside. It snowed until 11 a.m. January 17.

January 17, 1968, left Ketchikan via helicopter at 11 a.m., metered Unuk River from ice cover and serviced bubbler. Weather bad, poor visibility. Couldn't get over the pass to the Iskut River. Flew back to Wrangell for night, arrived 5 p.m. at dusk in snow storm.

January 18, 1968, left Wrangell at 11 a.m. for Iskut River above Snippaker Creek. Metered through ice cover, serviced recorder. Stayed night at cabin at station. Weather still bad, heavy snow on and off.

January 19, 1968, left cabin 8 a.m. and flew to Iskut River below Johnson River. Weather poor. Landed at recorder and serviced it. Took off for short flight downstream to suitable section on ice cover. While landing on a bar which was covered with 5 feet of snow, a sudden squall produced whiteout conditions. One float dragged in snow which caused the helicopter to tip. The main rotor caught the snow and the whole machine cartwheeled and ended up upside down. The last three or four feet of the tailboom, including the tail rotor blades flexed down beyond limits. The main rotors were mangled beyond repair and the plexiglass bubble was completely shattered. The transmission was probably damaged as well. Estimate of damage was \$20,000. No one was hurt as our seat belts held us in. All had minor scratches and bruises. Metered through ice cover adjacent to wreck. The radio in the wreck still worked so as were able to get word out. Second helicopter was able to take us out just before dark. Arrived Wrangell 5 p.m.

A GAUGE READER'S PLIGHT

by J.W. Clarke

At 1100 hours on March 1, 1969 Mr. MacInnis and I were engaged in obtaining a streamflow discharge measurement, and checking out the automatic stage recorder on the Wallace River.

Mr. Ira Brown who is the gauge reader for Water Survey of Canada, arrived at the gauge to perform a weekly inspection at 1100 hours on March 1, 1969. At the time of his arrival I was checking the oil level in the frost tube, and had the trap door to the stilling well open.

I read the tape indicator on the recorder, and then removed the float from the frost tube and placed it in the well. I was in the process of making a second reading of the tape indicator when Mr. Brown stepped through the door and fell through the open hatchway. I did not hear his approach and did not have time to warn him. My first act was to check Mr. Brown's condition, and then I called Mr. MacInnis from the vicinity of the Department Vehicle which was parked on the highway nearby.

With aid of two men, who were working on the highway bridge a short distance away, Mr. MacInnis and I were able to get Mr. Brown out of the well. He was then transported from the accident scene to his daughter's house by Department vehicle. We called an ambulance, removed his wet clothing, and made him comfortable in a warm bed. I then reported the accident to Mr. H.T. Simms, Area Engineer for Water Survey of Canada located in Halifax.

We talked with Mr. Brown regarding his injury and the accident itself. He apparently was slightly blinded by the bright sun on the snow and did not notice the open trap door in the dark gauge house.

We waited until he was picked up by the ambulance and Mr. MacInnis assisted in transferring him to the stretcher. He was then taken to the Colchester County Hospital in Truro.

We visited Mr. Brown at the Colchester County Hospital later that evening. His injuries were described as a dislocated left shoulder, and a broken bone in his right foot. The foot was in a cast.

A LOT OF BULL

by D. Kinley

It was late afternoon when I stopped at our gauging station on Yorkton Creek while on a field trip in the late 1950s. Our low water metering section was at a small dam which the farmer had constructed to provide a water supply for his cattle as well as an access across the creek from the pasture to the barn.

While I was stringing my tagline, a number of cows came over to the dam on their way to the barn side of the creek. Because I was standing on the dam and blocking their way, they stood on the far bank and started bawling. Their noise was tremendous. Approximately half-way through the measurement, the noise from the cows stopped and over the clicks from the headphones, I could hear strange scuffling and grunting sounds. Casually looking back over my shoulder, I realized I was now faced with a situation which was not covered in the field manual. Out on the dam and not more than fifteen feet away stood the farmer's bull, head down, snorting and pawing the ground.

Needless to say, the discharge measurement was not completed.

A LACK OF GAS

by I.A. Reid

We were moving our old Catamaran 2 from the Grenville metering section on the Ottawa River to the Beauharnois metering section on the St. Lawrence River . This metering section is just upstream of the Beauharnois Locks.

At the time, the Cat was powered by two old 50 hp motors. A 45 gallon drum of gas was aboard the Cat.

Our trip was uneventful until we reached the Locks. At that time our gas supply was running low.

We got into the Locks, sort of squeezed in with a couple of large ocean-going vessels. In the Locks we were looking-up about 80 feet to the top of the Locks.

During the time it takes the Locks to fill, I had the boys gas up the motors. I told them not to put the drum on an angle because all the sediment, rust, water and everything else that had settled to the bottom would be well mixed with clean gas.

I was watching the Locks fill-up and staying clear of the big ships and I didn't notice the boys gassing up. When we were ready to clear the locks I looked around the guess what - the boys had drained the 45 gallon drum by tilting it. I had a good idea what would happen and sure enough it did. On just about the first pull of the starter cord, one of the two motors quit. I continued to navigate or I tried to with one motor.

Here we were in the Locks with these big ships. Two boys trying to clean the carburetor. I'm trying to navigate with one motor. First I put the good starboard motor three-quarters throttle even though the rudders are hard right the boat veers to the port. Just before hitting the left wall of the Locks I put the motor full throttle in reverse and turn the rudder hard left. This brings the bow to the starboard. This zig-zag course was continued until we cleared the Locks. I hate to say that quite a few people aboard the boats and a few spectators on top wondered what the heck those goons were up to. Things have progressed a little since those days (i.e. the "Fast-Boat").

"THE PLANE FACTS"

by I.A. Reid

One time I was flying across the Mackenzie River in a small helicopter. We were carrying out a topographical survey of the area in the mid-fifties. Before crossing a river in a helicopter, the pilot gains altitude so that if the motor stops at any point over the water, the pilot can auto rotate to the nearest shore.

On this trip, the chopper was just about mid-stream when suddenly we couldn't see up, down, or sideways - we were completely engulfed in cloud. What do you do in a situation like this without an artificial horizon in the chopper. Our reference plane was lost. We didn't know if we were flying upside down, sideways or at what angle. This was frightening.

Suddenly I took off my climbing boots and held them by the lace. The only reference plane the pilot had was my boot which I held. The pilot very slowly and carefully lost altitude. We had an altimeter on board.

After what seemed like an endless time, we suddenly saw water flowing underneath. We slowly edged our way at 90° to the flow and after a while came to an island where we landed until the weather cleared.

HORSE-SENSE

by I.A. Reid

In the early fifties, the ruling powers figured it would be a good idea to have me head-up a horse party. I was, therefore, sent to do 1:250,000 phototop mapping of the Lake Laberge map sheet area which is situated just north of Whitehorse, Y.T. Our party consisted of 17 horses, 5 men and two stray dogs.

In early summer we got the horses shod, front hoofs only and set out. Our first experience was crossing the Yukon River at the lower end of Lake Laberge. My packer using his air mattress swam across and picked up a rickety old boat from an abandoned Indian camp. He came back, loaded up, kicked the horses in the water and got everything across without mishap. Our next experience was with the Teslin River. There was no such camp on the other side of the Teslin. We sat and watched the river for 3 days wondering what to do. If we built a raft our supplies could end up 10-20 miles downstream. The horses being good swimmers could go straight across more or less. I could visualize supplies and horses strung out for a distance of up to 20 miles had I elected to go by the raft method.

On the third night, out of the blue this old prospector came floating down the river. We hailed him frantically and told him of our plight. I paid him handsomely for the use of his boat.

A little farther on past Livingstone Creek where 3 million dollars was panned during the gold rush, our horse, Jocker, didn't show up. We didn't pack Jocker that day because of saddle sores; each horse is either named for its personality or it is named and assumes the personality.

I knew Jocker could make it back to Whitehorse. We had a pow-wow and decided to find Jocker. We spent 3 days looking high and low. I was searching on my horse Smoky and I saw a big grizzly. Fortunately, Smoky didn't see or smell the bear. I got Smoky turned around before trouble started. Eventually my packer found Jocker. Do you know where? Just this side of our last camp calmly eating nice green grass. Do you know also that Jocker was the fattest, had the most glossy coat and was the laziest horse of the pack. Jocker didn't strain a muscle unless she had to. Poor old black Nigger was the hardest worker and do you know the harder she worked, the more work she was given.

THE AUTO-CHOPPER

by I.A. Reid

I was working for Topographical Survey on a 1:250,000 helicopter mapping project around Great Bear Lake in the early fifties. I always wanted to see the Lake, having heard so much about it.

One day out flying in a Hiller 360 helicopter about 100 miles from the Lake, I casually suggested to the pilot that we may be able to see the Lake if we could get high enough. That was all the pilot needed.

We started to gain altitude with just about full throttle. As one goes up the air becomes thinner and the rate of climb becomes less. These old choppers had no super-charger. At about 7,000 feet altitude, the chopper was gasping for air. At 7,500 feet the chopper refused to climb. I felt very unstable and insecure as the pilot could barely control the machine at that altitude. Finally we realized that we would not see Great Bear Lake that day.

We were 7,000 feet above ground level when the pilot decided to auto rotate. I was to time our rate of descent using a stop watch. Here we were 100 miles from nowhere auto rotating at the rate of 2,000 feet a minute at a 45 degree angle. Just above ground level the pilot fired-up the motor and we continued on our way. What a relief to hear the sound of a motor and be near mother earth. I always feel safer close to the ground when flying. Maybe subconsciously I think that if the blades fly off that one can fall to the ground unhurt.

A GASSED GREENHORN

by I.A. Reid

In the spring of 1949 I landed in Yellowknife and met Eric Fry. Mr. Fry was heading a party to do some 1:50,000 mapping around McLeod Bay and north in the barren lands.

I was a greenhorn on the party. For transportation we had square stern freighters and prospector canoes.

The party of about six people set out in four canoes. The plan was to more or less follow the north shore of Great Slave Lake to McLeod Bay. We set out with myself more or less steering the rear canoe. I was being pulled by a freighter canoe. At the noon break on the first day out, I got out of the boat very dizzy. That night I was very dizzy wobbling all over the place. Some time that night it suddenly occurred to me what was happening. All day I had been sucking in gas fumes from the boat towing my canoe. Anybody who has operated an outboard motor sees the oil-gas fumes escaping a short distance behind the motor.

Greenhorns shouldn't suck in carbon monoxide, carbon dioxide, or other gases. Even though we knew the dangers of CO, it wasn't a sufficient lesson to prevent a death of one of our party later that summer from CO gas.

LATE STARTER

by I.A. Reid

We were making a discharge measurement at high water stage on the Ottawa River at Britannia using the old catamaran 2.

If some of the boys arrived late, after 8:15 a.m., I'd take the cat out and anchor it to the first buoy.

When the boys showed up, I would send one of the fellows on the cat with me to shore in our safety boat to pick up the late comers.

This time Lorne Hanes untied the green boat and tried to start the motor just above the Britannia Rapids. Lorne was pulling on the starter cord but the motor wouldn't start. The thought raced through my mind - do I cut the head line cable and go after Lorne risking the three lives on board or do I let Lorne risk his life. The chances of getting to Lorne before going over the Rapids were mighty slim. I elected to let Lorne fight his own battle.

At the last split second Lorne grabbed the oars and by rowing madly he was able to hit shore just above the rapids. The boys on shore caught the boat and pulled it upstream. Everyone breathed a sign of relief. Lorne got calmed down, started the motor and came back to the cat.

"Motto" - "Never, never leave the mother ship without having the motor running; especially above dangerous rapids."

FIVE FINGERS AND ONE EYE

by I.A. Reid

On my first trip down the Yukon River on the power site survey in the mid-fifties, I noticed that our boat man ran our river boat just about full throttle docking at Carmacks. The crew, except for the surveyors, were mostly picked up from the bars in Whitehorse. Most of them, to hear them talk, knew the river like the back of their hands.

I was sceptical of the one bearded sourdough called Percy as I heard it rumored that he could only see with one eye.

Not far downstream from Carmacks is the Five Finger Rapids. I had heard a lot about these Rapids. The river boats had to be winched up the rapids.

Taking no chances, I told Percy that I was taking the boat through the rapids. He looked at me and just about quit on the spot, but just starting a new job and penniless, he didn't say much. We went downstream and I soon learned what the Five Finger Rapids were like. There are five channels formed by an island of rock in the river. I chose the channel that supposedly the river boats went through and shot them without trouble. Actually the stories we were told about the severity of the rapids were much worse than they really were. During the power site survey of the Five Finger Rapids site we covered all the channels thoroughly without mishap. Even Percy piloted the river boat part of the time.

"THE TENDER TOUCH"

by I.A. Reid

During a terrestrial photogrammetric survey of the Sentinel Glacier in Garibaldi Park in British Columbia, I and my partner from Vancouver had to traverse a very steep sloping snow patch on the glacier to get to a triangulation station.

I was ahead cutting steps in the snow with my ice axe. My inexperienced partner was coming behind. Suddenly I heard a noise and my partner was sliding on all fours frantically trying to dig his ice axe into the snow to get stopped or at least to slow-up his rate of descent.

My partner slid to the bottom with only a few minor scrapes and bruises. He gamely walked to the ice, climbed up to my path to make another try.

Meanwhile, I continued on my journey across the snow patch. At about the most critical point, I was cutting steps, when suddenly the sharp end of my ice axe struck the most tender part of my body. I just about curled up in agony and nearly slide to the bottom in a rather dangerous part of the snow patch. I sort of lay against the steep sloping side for at least five minutes, before even thinking of proceeding. After the shooting pain was over I very carefully made it to the triangulation station with my partner not far behind.

The following are a collection of short tales during the period 1918 to 1931 as reported by Robert D. Barnetson, Calgary retired Branch employee:

What Bridge! (1918)

A.W.P. Lowrie and his helper were returning to Cardston in the late evening, driving an open (and I mean very open) Ford when they began passing farm wagons of every description returning home from a picnic and sports day at Magrath. In every case Lowrie pulled wide off the dirt road to allow the farm horses the best of it. He finally pulled over to pass a hayrack and landed in the bottom of a 10 foot coulee. Extricating himself from the wrecked Ford he casually remarked to his helper "Hell that was a bridge, not a hayrack".

A Close Call! (1921 or 1922)

W.G. Stewart and Keith Dodds were making a cable measurement during high water on the North Saskatchewan River at Rocky Mountain House when the right cable tower collapsed, dumping them both into the river. Stewart was thrown clear and swam ashore but Dodds was caught by a nail through the collar of his jumbo knit sweater and unable to free himself. When Stewart realized the predicament Dodds was in he immediately swam out and released him but Keith has already taken a severe beating by being jerked out of the water and slammed back in again as the cable and car and Dodds were being carried downstream to the limit of the slack in the cable and then jerked back upstream. I believe this was as close as we ever came to having a fatal accident in the Calgary office. We often had accidents because of the early equipment but we were able to laugh them off.

The Short Prairie Night (1924)

Thorhalder H. Hermann (A Selkirk Iclander with a peculiar clipped accent) and I pulled in to a farmhouse and begged a night's lodging. The farmer invited us in and his wife made us a meal. After visiting with the family we retired about midnight, only to be roused out about 4:00 A.M. for breakfast with the threshing crew. Breaking the ice on our water pitcher Hermann remarked "don't take long to spend all night here."

The Last Supper (1931)

When rumours of the transfer of Natural Resources to the Western Provinces finally became fact and more than half the Calgary staff were given two weeks notice of dismissal, with vague promises of future re-employment in some other capacity, it was as though the roof had fallen in. Those of us who were being dismissed hired a Banquet Hall in the York Hotel and had ourselves a party to end all parties. Some wit remarked that it was similar to the original Last Supper and the name stuck.

The next stories or articles were submitted by the Calgary Regional Office:

Overnighting in a Station Wagon

Marv Simpson had the misfortune of developing starter trouble while at the "Clearwater River above Limestone Creek" gauging station. Since this occurred in the late afternoon he was forced to spend the night in his vehicle. He had removed his parka from his vehicle the previous week and, with the temperatures dipping down below the freezing mark, I understand it was a most uncomfortable night. Marv's adventures didn't end here however as, in the morning, after getting to the Clearwater Ranger Station by a combination of walking and catching a lift, he was informed that the rangers weren't in the business of helping stranded motorists. Thus Marv had to make his way to Ricinus.

The Scuttling of a Canoe

Captain Nemo and the crew of the Nautilus have been reincarnated in the guise of Chuck Robinson as Captain Nemo and two student assistants, Ralph Holt and Barry Broderick, as the crew. This motley assembly has been plying the waters of the Oldman River but, like the original Captain Nemo, it appears they prefer underwater sailing. This is fine, but in a canoe? In order to measure the return flow from the St. Mary River Irrigation District and Lethbridge Irrigation District, it was decided to travel the Oldman--South Saskatchewan River system and measure the return flow channels at their points of entry to the river. To do this a canoe and kicker were purchased. However, on the inaugural trip the "sonar" wasn't working too well and the canoe was split in two on a rock. Fortunately the canoe is of fibreglass construction which enabled us to have repairs made to it. The second trip, I gather, went quite smoothly.

Phone Messages!

Milt's wife was going on a short trip. As she was leaving, she suddenly remembered something and called the office. Vicki answered, and Elaine instructed her to inform Milt that the alarm clock on his side of the bed was not plugged in. "I'll be glad to tell him" replied Vicki, "and who shall I say called?"

"Busted Meter Award" (1973)?

It happened that Kelt Davies decided he required a holiday from the kids (or was it a field test of a recent operational matter) over this past week-end and so Kelt and Linda retreated to a cozy little cabin on Kananaskis Lake in spite of (or because of) forecasts for heavy snow. Anyway, they departed on Thursday fully expecting to return on Sunday. However, Monday morning arrived and Kelt did not. Tuesday and Wednesday mornings indicated the same fact. So on Wednesday the troops were mobilized to set up a rescue attempt with the formation of SRACC (Search, Rescue and Construction Crew) headed by Harry Wagner. This fearless crew was to brave the perils of the dreaded Kananaskis

Valley on Thursday in a combination four wheel drive - snowshoe rescue attempt. The mettle of this crew was not tested, however, as Kelt and Linda staggered out Wednesday evening. It seems they snowshoed some four miles and walked another sixteen miles before getting a lift. As a sequel to this story it appears that Kelt will not be able to retrieve his car until sometime in late May. Obviously anyone trying to outdo Kelt for the award will have to expend a stupendous effort.

"After hours-sport" (1972)

Chuck Robinson and I went out after ducks one evening and Chuck gave me a few pointers - there was this duck sitting out in the water and although it was a little out of range he said he'd show me how to get it. After the eighth shot and the "duck" still sitting there we decided to have a closer look - it turn out to be a "wood duck", that is a piece of wood sticking out of the water. I have the feeling he's trying to make it two in a row for the bent meter award.

"The Saga of Leaky Leoppy"

Once upon a time, Leaky Leoppy made a preliminary trip to the Fort Simpson area. During this eventful excursion many incidents occurred at each station. The most exciting episode happened at the Willoelake River where Leaky proceeded to show us a submarine crash dive in an over-powered 12-ft. aluminum boat.

The boat was equipped with a small thermos-type plug for drainage purposes. On this particular occasion, during the ride between the plane and the gauge, our friend at the helm noticed that the boat was taking on water through the drain hole. After unloading the boat of equipment and men, including life jackets, Leaky also decided to empty the boat of water. He was informed that the easiest way was to drive the boat upstream at full speed and to pull the plug.

Our hero pushed the boat from shore without the engine running and the boat was weighed down considerably with the kicker, gas can, water and himself, at the rear of the boat. These items did not bother our man though; he proceeded to pull the plug, then he started the engine at full throttle while it was still in gear...

Luckily the river being both narrow and shallow, Leaky and boat were quickly and easily rescued.

Mr. Leoppy was not easily swayed though - he was still determined to stop that leak! Upon hauling the boat up on shore and emptying its contents he decided that the only way to stop the boat taking on water was to take off his boots, take off his socks and insert the plug into the socks then stuff the whole works into the drain hole. This new method for stopping leaks was used for the duration of the measurement, then with much ceremony the wet and soggy socks were presented to our inventor. A screwdriver was produced, the screw at the bottom of the plug was tightened, and everything returned to normal.

"Hold that Plane"

It seems when Vance Elder left for Kemptville he misread the time of departure (so he says, but the flight left Calgary in the morning and we all know that Vance is somewhat of a late riser). Anyway Vance arrived at air terminal just at the time that the aircraft was taxiing down the runway. Can't you just picture the ludicrous sight of Vance tearing down the runway after the plane with his shirt-tails flying and suitcases spilling.

Fort Simpson Student Assistants (1973)

Lorne is sent down to wash the truck and is proudly standing beside his finished?? product.

Chuck - "Aren't you going to wash the windows, wheels and tailgate?"

Lorne - "If Ken would have wanted me to wash them too he would have told me".

Lorne being taken down to dock to paint fuel stand and as he's putting paint into truck.

Ken - "Better bring a paddle to stir the paint."

Would you believe an oar?

Arriving home from a field trip we found the gauge on the Mackenzie River at Ft. Simpson unserviceable - like the mercury blown and the drive chain torn in two.

Ken - "What happened to the gauge?"

1

Students (in unison) - "We were just reading the counter and all of a sudden the mercury blew out and the chain flew off."

Students left to clean up boat and after our return about an hour later.

Chuck - "How come you didn't get it cleaned up?"

Students - "We couldn't get the water pump to work."

(The boat was sitting on the Mackenzie River at the time).

"Scratch one trailer"

Brian, the Bruiser, nee Van Iderstine, experienced some difficulty with the skidoo trailer wheels this past month. It seems he was driving along Southland Drive in Calgary when the lugs gave up the ghost and a tire went rolling down the road. Brian bounded out of the car after the tire but, before he was able to reach it, an anonymous vehicle stopped, the driver picked up the wheel and threw it in the car. In spite of Brian's gazelle-like leaps, he was unable to apprehend the crook and as a result we are minus one trailer wheel. To whom else but Brian could such a thing occur?

Environment Canada - Environnement Canada

Water resources field experiences

POPE, D. B

30229466

00FF